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Conference Abstract

Building the Australian National Species List

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Abstract

The Australian National Species List (AuNSL) is a unified, nationally accepted, taxonomy for the native and naturalised biota of Australia. It is derived from a set of taxon-focussed resources including the Australian Plant Name Index and Australian Plant Census, the Australian Faunal Directory, and similar lists of fungi, lichens and bryophytes. These resources share a common infrastructure, contribute to the single national taxonomy (AuNSL), but retain their independent curation practices and online presentation. The AuNSL is now the core national infrastructure providing names and taxonomy for significant biodiversity data infrastructures including the Atlas of Living Australia, the Terrestrial Ecosystem Research Network, the Biodiversity Data Repository, and the Species Profile and Threats Database.

As the go-to resource for names and taxonomy for Australia's unique biodiversity, the AuNSL must be constantly updated to reflect taxonomic and nomenclatural change. For some taxonomic groups, the AuNSL is substantially complete, and the incorporation of new taxa and other novelties occurs with little time lag. For other taxonomic groups the data are patchy and updates sporadic. Like similar projects, the AuNSL would benefit from improvements to taxonomic data publishing and sharing. Such improvements have the potential to enable automated, real-time ingestion for new taxonomic and nomenclatural data, allowing curator time to be re-directed to backfilling the historical data from a dispersed and complex literature. Ideally, the AuNSL will be able to benefit from advances in automated approaches to processing the historical data, including via the sharing of standardised representations of such data.

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Here we outline the AuNSL data model, editor functionality, and describe our approach to sharing our data via existing and emerging standards such as Darwin Core and Taxon Concept Schema (TCS2). We then describe what we, as consumers of taxonomic data from published works, really need from publishers of new, and reprocessed historical data. In brief, we need structured taxonomic data conforming to an adequate standard.

Keywords

data standards, structured taxonomic data, list building

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Conflicts of interest

The authors have declared that no competing interests exist.